

EAST BUILDING

The East Building was built with funds provided by Paul Mellon, Ailsa Mellon Bruce, and the Andrew W. Mellon Foundation. The 8.8-acre trapezoidal site on which the East Building was constructed at Andrew W. Mellon's request was set aside by Congress for future expansion when the museum was established in 1937. Construction of the East Building began in 1971 and was completed in 1978. The underground Concourse between the East and West Buildings opened in 1976. The building was dedicated on June 1, 1978, and opened to the public that day.

ARCHITECTURE The East Building was designed by architect I. M. Pei. The architect's design for the building is informed by its trapezoidal site. The architect divided the shape into two triangles—an isosceles triangle for exhibition and public functions, and a smaller right triangle for an administrative and study center. These triangular shapes define the building's major spaces and are echoed and repeated throughout the structure.

STRUCTURE The 604,000-square-foot East Building is supported on a six-foot-thick foundation mat with special waterproofing to resist the high water-table pressure of the ground. Three long-span steel trusses, collectively weighing 540 tons, are used in the building.

MATERIALS AND CONSTRUCTION FEATURES The same Tennessee quarries that supplied marble for the exterior of the West Building were reopened for the East Building. Exterior blocks measure two feet high by five feet wide and are three inches thick. Architectural concrete used throughout the building contains finely ground Tennessee marble dust to give color and sparkle to the surface. On the exterior, two of the largest poured-concrete beams span two hundred feet. Coffered ceilings were fabricated in special hardwood forms crafted by cabinetmakers.



KNIFE EDGE The shape of the building's plan creates an exterior knife edge of slightly less than 19.5 degrees at its southwest corner.

ATRIUM SKYLIGHT / SPACE FRAME The space frame above the main atrium is 225 feet long on two sides and 150 feet long on the third side, and covers 16,000 square feet. Its welded steel frame weighs five hundred tons. Each of the twenty-five tetrahedrons of the main skylight is thirty feet at its base and forty-five feet on the two equal sides.

PUBLIC SPACES A faceted glass space frame above the triangular atrium opens the space to changing conditions of the sky above. Exhibition areas are located in three towers at the atrium's corners, with additional gallery space located in bridges between the towers. Exhibition rooms also are located on the Concourse, together with auditoriums and public services.

ADMINISTRATIVE AND STUDY CENTER The Administrative and Study Center holds eight levels of curatorial and administrative offices and an art reference library, with space for some 350,000 volumes. A six-story atrium serves as the functional, symbolic, and visual focus for the Study Center and Library.

CONCOURSE The Concourse joins the East and West Buildings below ground level. The Cascade Café, Espresso & Gelato Bar, Concourse Bookstore, and Children's Shop are located there. Seven glass tetrahedrons and a cascading waterfall bring light and motion to the underground space.

